

ITEMS OF INTEREST.

VOL. VIII.

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No. 3.

Shots from the Profession.

CANTILEVERS.

J. W. CLOWES, D. D. S., NEW YORK.

The possibilities of *amalgam* in dentistry are boundless! It takes a veteran, in its use, to be able to say this, and, being a veteran myself, I speak with confidence of the things I know. Building up *en masse* and contouring with this material around platinum screws well set in the dental canals, is a familiar practice with me, and I used to think whenever this was done to rickety old shells and crownless roots that a limit to progress in that direction had come. But the attained was only an opening door to greater achievement. In the summer of '84, a gentleman, suffering greatly from a troublesome tooth, came to my office and thus expressed the burden of his griefs: "I am," said he, "stopping, with my family, at Lake Mahopac. My nervous system and general health are in sad disorder; yesterday I had a *severe chill*, which my physician attributes entirely to a wretched tooth, that for several months has been, without avail, under professional treatment. I have come to the city with intent to have it extracted as my only means of relief, but before leaving the lake a friend requested me, as a personal favor, to call on you and get your advice. In deference to his wishes I am here, and seek to know if comfort can be gained by any other means." I examined his tooth, which was a middle molar of the lower jaw. It had been badly excavated and filled with gutta percha, and on removing this, the cause of trouble was made apparent. The dead pulp had only been partially removed, and a persistent effort to disinfect the rest—kept up for months—had disgusted nature with the original and the applied offense. I gave encouragement that the tooth might be saved, reserving, however, the proviso that such an extended *bedevilment* might possibly thwart all my endeavors. *Oh! how sore that tooth was to the slightest touch.* But salvation admitted of no delay. With Spartan bravery my patient was equal to every requirement of cleansing and disinfection, and I sent him away, *still suffering but hopeful.* On the following

morning he was found to be more comfortable, but by night the symptoms were less favorable, and I could only offer cheer by the reminder that "the darkest hour is just before day."

The next morning he came again, with a terrible report of suffering and sleeplessness, and cried out in his agony, "All you have done is of no use; I cannot stand it any longer." It was a very sad case, indeed, but I looked to see what reason he had for his despair. My first glance in his mouth caused me to exclaim, "*Veni, vidi, vici*,"—the day is breaking, your tooth is safe, and you shall yet be happy in its possession. My efforts had been met with coöperation by the natural forces, and a deep-seated abscess was struggling for exit through the process and the gum. Nature's grand effort to slough off disease was resulting in triumph. I aided the effort with my lance, and the eruption was complete. A few days later I filled this tooth with *amalgam*, supported by screws, and restored it to its full proportions; but, after all that had been done, there was still *one weakness* to overcome. Between this tooth and the second bicuspid was a vacant space (occasioned by absence of the first molar) toward which it considerably inclined, and *malocclusion kept it vacillating continually in its socket and the gum*. Acted on by the double irritation of motion and foreign matter about its roots, it was not reasonable to expect it to remain well. Immobility and steadiness were the aids I sought, and to this end I cut a deep and broad dovetail in the substance of the built up tooth, added more screws, and then, with *amalgam*, *projected the cantilever over the vacant space till it bore against the bicuspid in its front*. With this support, through humble means, *firmness and stability were gained; kind nature renewed the gum and bony tissues*, which untoward conditions had forced away, and the recipient of all this good rose up and called me blessed.

Born from the thought of that matchless structure which spans the whirlpool and the chasm, the *cantilevers* of the mouth may be the sources of many benefits to the human race.

Cleaning Artificial Teeth that have been used, when scrubbing them with sand, brush, etc., fails to have the desired effect. Put them in a Hessian crucible; cover with wood or coal ashes to protect them from sudden changes of temperature; then in the stove into a very hot coal fire and heat them till the whole are red hot, then set away till cool. They come out as bright and clean as if newly baked.

Can anyone give me a method of trueing up a corundum stone when out of true?

C. THOMAS, Tioga, Pa.

DISINFECTANTS.

The annual meeting of the Public Health Association was opened in Washington, Dec. 8th. President, Dr. James E. Reeves, of Wheeling, W. Va. Various addresses were made and papers read. The committee on disinfectants consisted of Drs. George M. Sternberg, U. S. A., Joseph H. Raymond, Brooklyn, Charles Smart, U. S. A., Victor C. Vaughn, Michigan, A. R. Leeds, New Jersey, W. H. Watkins, New Orleans, and George H. Rohe, Baltimore. Their report was presented. The following are their conclusions:

The most useful agents for the destruction of spore containing infectious material are—

1. *Fire.* Complete destruction by burning.
2. *Steam under pressure.* 110° C. [230° F.] for ten minutes.
3. *Boiling in water* for one hour.*
4. *Chloride of lime.*† A 40 per cent solution.
5. *Mercuric chloride.* A solution of 1 : 500.

For the destruction of infectious material which owes its infecting power to the presence of micro-organisms *not containing spores*, the committee recommends.

1. *Fire.* Complete destruction by burning.
2. *Boiling water* half an hour.
3. *Dry heat.* 110° [230° Fahr.] for two hours.
4. *Chloride of lime.*† 1 to 40 per cent solution.
5. *Solution of chlorinated soda.*‡ 5 to 2000 solution.
6. *Mercuric chloride.* A solution of 1 : 1,000 to 1 : 4,000.
7. *Sulphur dioxide.* Exposure for 12 hours to an atmosphere containing at least 4 volumes per cent of this gas, preferable in presence of moisture.§
8. *Carbolic acid.* 2 to 5 per cent solution.
9. *Sulphate of copper.* 2 to 5 per cent solution.
10. *Chloride of zinc.* 4 to 10 per cent solution.

The committee would make the following recommendations with references to the practical application of these agents for disinfecting purposes:

FOR EXCRETA.

(a) In the sick room:

* This temperature does not destroy the spores of *B. Subtilis* in the time mentioned, but is effective for the destruction of the spores of the anthrax bacillus and of all known pathogenic organisms.

† Should contain at least 25 per cent of available chlorine.

‡ Should contain at least 3 per cent of available chlorine.

§ This will require the combustion of between 3 and 4 pounds of sulphur for every 1,000 cubic feet of air space.

For spore-containing material :

1. Chloride of lime in solution, 4 per cent.
2. Mercuric chloride in solution, 1 : 500.*

In the absence of spores :

3. Carbolic acid in solution, 5 per cent
4. Immersion in the blue solution (mercuric chloride and sulphate of copper) two fluid ounces to the gallon of water.
5. Sulphate of copper in solution, 50 per cent.
6. Chloride of zinc in solution, 10 per cent.

(b.) In privy vaults :

Mercuric chloride in solution, 1 : 500.†

(c.) For the disinfection and deodorization of the surface of masses of organic material in privy vaults, etc.:

Chloride of lime in powder.‡

FOR CLOTHING, BEDDING,§ ETC.

(a.) Soiled underclothing, bed linen, etc. :

1. Destruction by fire, if of little value.
2. Boiling for at least half an hour.
3. Immersion in a solution of mercuric chloride of the strength of 1 : 2,000 for four hours.§
4. Immersion in a two per cent solution of carbolic acid for four hours

(b.) Outer garments of wool or silk, and similar articles, which would be injured by immersion in boiling water, or in a disinfecting solution :

1. Exposure to dry heat at a temperature of 110° C. (230° Fahr.) for two hours.
2. Fumigation with sulphurous acid gas for at least twelve hours, the clothing being freely exposed, and the gas present in the disinfection chamber in the proportion of four volumes per cent.

(c.) Mattresses and blankets soiled by the discharges of the sick :

1. Destruction by fire.
2. Exposure to superheated steam—25 pounds pressure—for one hour. Mattresses to have the cover removed or freely opened.
3. Immersion in boiling water for one hour.

* The addition of an equal quantity of potassium permanganate as a deodorant, and to give color to the solution, is to be recommended (*Standard Solution*) No. 20.

† A concentrated solution containing four ounces of mercuric chloride and one pound of cupric sulphate to the gallon of water is recommended as a *standard solution*. Eight ounces of this solution to the gallon of water will give a diluted solution for the disinfection of excreta, containing about 1 : 500 of mercuric chloride and 1 : 125 of cupric sulphate.

‡ For this purpose the chloride of lime may be diluted with plaster of Paris or with clean, well-dried sand, in the proportion of one part to nine.

§ The blue solution containing sulphate of copper, diluted by adding two ounces of the concentrated solution to a gallon of water, may be used for this purpose.

FURNITURE AND ARTICLES OF WOOD, LEATHER AND PORCELAIN.*

Washing several times repeated with :

1. Solution of mercuric chloride 1 : 1,000. (The blue solution, four ounces to the gallon of water, may be used.)
2. Solution of chloride of lime 1 per cent.
3. Solution of carbolic acid 2 per cent.

FOR THE PERSON.

The hands and general surface of the body of attendants of the sick, and of convalescents at the time of their discharge from the hospital :

1. Solution of chlorinated soda diluted with nine parts of water 1 : 10.
2. Carbolic acid 2 per cent solution.
3. Mercuric chloride, 1 : 1,000 ; recommended only for the hands, or for washing away infectious material from a limited area, not as a bath for the entire surface of the body.

FOR THE DEAD.

Envelop the body in a sheet thoroughly saturated with :

1. Chloride of lime in solution, 4 per cent.
2. Mercuric chloride in solution, 1 : 500.
3. Carbolic acid in solution, 5 per cent.

FOR THE SICK ROOM AND HOSPITAL WARDS.

(a.) While occupied, wash all surfaces with :

1. Mercuric chloride in solution, 1 : 1,000. (The blue solution containing sulphate of copper may be used.)
2. Chloride of lime in solution, 1 per cent.
3. Carbolic acid in solution, 2 per cent.

(b.) When vacated :

Fumigate with sulphur dioxide for 12 hours, burning 3 pounds of sulphur, for every 1,000 cubic feet of air space in the room ; then wash all surfaces with one of the above mentioned disinfecting solutions, and afterward soap and hot water, finally throw open doors and windows and ventilate freely.

Cutting and Centering Sand Paper Disks.—Secure from a gunsmith a gun wad cutter of any diameter you desire, insert a steel wire in the center the size of your mandril screw, place a cork inside the cutting edge protruding from the edge a trifle ; this acts as a spring in throwing off the disks. Shellaced flint paper cut with this device makes disks at little expense.

C. U. KENNEDY, Washington, D. C.

* For articles of metal use Solution No. 3.

IS THE GENERAL HEALTH AFFECTED BY DENTAL IRRITATION?

DR. FRANK ABBOTT IN N. Y. ODONTOLOGICAL SOCIETY.

Dr. Sexton has something over three thousand cases that he has made a record of in his private practice and at the New York Eye and Ear Infirmary, all of which came to him for treatment of some disease of the ear. In every case the patient was recommended to have certain diseased teeth or roots of teeth removed from the mouth. In each the removal of the teeth seemed to affect the case favorably, and in a majority the disease of the ear was cured. This is a revelation not only to dentists, but to the medical profession as a whole; especially does it impress on the minds of oculists and aurists the necessity of examining the mouth and teeth, or the consultation with a competent dental surgeon to see if there is any trouble which might cause the affection of the eye or the ear they have under treatment. I think it a great pity we cannot have in New York some oculist who would take the same pains that Dr. Sexton has taken, and make a similar record of cases with reference to diseases of the eye. Such statistics would be very interesting and instructive both to the dentist and to the general practitioner. I have had many cases in my practice where operations on the teeth have very favorably affected diseases of these remote organs, and often cured them. I have seen the good results obtained from the removal of wisdom teeth, for instance, where diseases of the ear had been treated by aurists without affording relief, and where the extraction of the wisdom teeth was followed by almost instant cure. Not long since I had a case that was in the hands of an aurist in this city. After treating it three or four weeks, he told the patient he could not tell what the cause was of the inflammation and pain in her ear, and did not know what to do to relieve it. He is an excellent man,—one who understands his business,—yet there was something about that case that was a mystery to him. The patient applied to me to learn the cause of and obtain relief from pain and soreness in a right lower first molar which I had filled for her some fifteen months before. I found the pulp dying. I opened the tooth at once, and the moment I penetrated the pulp chamber the pain in the ear, which was at that time quite severe, left her, and in two days the ear was well. It has given no trouble since. Such cases can be enumerated by the hundreds, by many of us. That there is a certain amount of irritation produced by all pulpless teeth in the mouth, I have no doubt. That it is latent or secluded in many instances I know very well. Patients tell me they have such and such dead teeth in their mouths, that they are as good as any teeth they have. If, however, with my thumb and finger I move one of them back and forth, or strike it gently with an instrument, they say it has a different feeling from a living tooth,—it has a numb feeling. Still those teeth do not pain them

ordinarily; they have no sensation of soreness in eating; consequently they are kept in the mouth year after year, and patients are happy in the delusion that they are "rid of trouble from those teeth because they are dead."

I wish to call your attention particularly to one statement that has been made by Dr. Sexton about the *permanent retention* of teeth in the mouth. What brought it about was seeing cases of so-called bridge-work, where the crowns of half a dozen teeth have been attached to one or two roots, and those roots were expected to stand the strain of mastication of that excessive number of crowns. That is a practice from which it would seem a great deal of trouble might arise, and that is what the author of the articles referred to meant by the "retention permanently" of sets or partial sets of teeth in the mouth.

It is not exclusively diseases of the eye and ear that we have to contend with, but other diseases, such as neuralgia and abscess of the antrum, caused by diseased and dead teeth. We operate on the teeth, look around the mouth, and find no evidence of anything out of the way; still in many cases, if we would question the patient, we should perhaps discover there is an excessive discharge from the nose on the one side, for which they are under treatment for nasal catarrh, and an investigation would determine that in many instances where we do not suspect it, there is abscess of the antrum causing it. The oculist and the aurist see their patients for their specialties, they know nothing about the teeth, and so they fail to discover any connection between them and the disturbances they are called on to treat. In the same way people come to us to consult us about their teeth. They say nothing about having any ear or eye trouble, because they go to some specialist for the treatment of those diseases, and for neuralgia or catarrh they probably go to a specialist or a general practitioner. All these specialists and general practitioners have patients coming to them for treatment of special diseases, and the one knows nothing of what the other has done, nor are any questions asked of the patient. I have a case in hand now, of a very eminent gentleman in this city, who has had for about five months a very severe sore throat, for which he has been under treatment. He has been a great smoker, and his physician told him he thought he had smoker's sore throat. From examining his throat he could account for the trouble in no other way than from smoking. Consequently the gentleman reduced his smoking to one cigar a day for several months, but experienced no relief. About ten days or two weeks ago he smoked his last cigar, stopping it altogether. The same day that he quit smoking he came to my office and said he had a tooth which was giving him a great deal of trouble, and wished me to examine it. He said that Dr. So-and-so thought it ought to come

out; it was giving him so much pain. I extracted it, and the pain subsided, and that part of his trouble was gone. He then expressed a desire to have his teeth generally attended to, and I made an appointment, telling him I fancied his throat would feel some better when the work to be done in his mouth had been completed. A few days after I saw him, and he said his throat began to feel a little better. I went on with the work, and took four teeth out, each of which any competent dentist would say was sufficient, possibly, to cause his sore throat.—at least that it would be a factor in that disturbance. After the removal of those teeth his throat improved very materially. I have been informed by his son since that his father's throat is entirely well. I think we ought to thank Dr. Sexton for the excellent work he has done, and for calling attention of medical men to the possibility of disturbances in various parts of the head and of the general system being caused by dental irritation.

Some one was telling me not long since—I think it was Dr. Woodward—that a patient of his had been entirely relieved of a very severe pain in the side, I think in the region of the pectoral muscles, by the removal of a filling where the pulp had been capped. That kind of irritation, as Dr. Howe remarked, is prolific of much pain,—at least if the work is not very carefully done. I really think, however, it is our duty to save every tooth alive if we can, to prevent possible alveolar abscess, as well as discoloration of the teeth; and it is much less trouble for us than it is to treat them after the pulps are dead. There are many teeth from the roots of which it is impossible to entirely remove the pulps, and if any portion is left decomposition will sometimes follow, unless it is so embalmed as to prevent it, which is not always practicable, because the pulp canal is often filled with the dead pulp so solidly that it is next to impossible to get antiseptics in and round it. Added to this is the putrefying organic portion of the dentine itself, which I think is no small factor in periosteal irritation. The effort to save teeth in many cases where it is attempted is, in my judgment, injudicious. I think the retention of teeth in the mouth when they are disturbing the patient, either locally or remotely, (which may generally be determined by consultation if desired), is “ill advised.” The patient suffers more from the presence of such teeth than the teeth can possibly compensate. There are many cases, in my opinion, of what is known as pyorrhea alveolaris where teeth are kept in the mouth that are a source of constant irritation which never subsides as long as they remain. However, I never allow a case to pass without an attempt to save the teeth if they have antagonizing teeth and can be made useful. There are many teeth which have no antagonists, and are the source of suffering. I have no doubt where such teeth in

the upper jaw have no antagonism, exostosis occurs in mouths that are otherwise healthy, simply because the weight of the teeth produces constant irritation, and results in a thickening of the cement, and consequent enlargement of the root of the tooth, which causes severe and lasting pain. A few days since I had a case of this kind. The tooth was extremely sore, with no antagonizing teeth below. The pulp was alive; a small filling was in the crown; the alveolar process had been lengthened, or had grown down considerably by the suspension of the tooth, which was an eighth of an inch below its normal position. There was a thickening of the bone all around it, amounting to what is known as hyperostosis. There are many diseases caused by dental irritation never treated. I believe not more than a quarter of the people in this great, enlightened city of New York attend to their teeth, or have a regular dentist; the other three quarters have nothing done except to have them extracted as soon as they become troublesome. We see an illustration of this at the infirmary of the college. Thousands of people come there who never saw a dentist's chair till then. They include old and young,—men, women and children,—with all kinds of teeth and all possible diseases of the mouth that you can imagine, seeking treatment. Is it therefore a wonder that Dr. Sexton, or any other physician attached to an eye and ear infirmary in this city, who will take the pains to record the cases that come under his observation, should get results similar to what we have reported? I think we are greatly indebted to Dr. Sexton for what he has done, and let us hope that somebody else will record and report similar observations in other directions. The results are certainly interesting and instructive, and will tend greatly to relieve suffering.—*Cosmos*.

Saving Teeth.—It is, and should be, the aim of dentistry to preserve the natural teeth. But the popular idea of the business of a dentist is that he is created for the special purpose of extracting teeth and hurting people; and, unfortunately, this idea is the result of the practice of the average dentist in the past, and of many below the average in the present, who would no more think it possible to save an aching tooth than to raise a man from the dead. "Pull 'er out," is the too general advice, and one after another, a dozen or more, go with it to be replaced by a set of artificial teeth the rest of the natural life.—*Health and Home*.

Sir James Paget, who has traced the fortunes of 1000 medical students, finds that 23 of the number achieved distinguished success, 66 has considerable success, 507 made a living, 124 had a very limited success, and 56 failed utterly. The rest either died or abandoned the profession soon after entering it.

DENTAL HYGIENE.

EDITOR ITEMS:—I like that article of Dr. Phillips on this subject in your January ITEMS. How much depends on the Dental practitioner. And as I turn my thoughts to some of my patients I cannot help thinking how often the dentist is to blame for its neglect. A case in point: Mrs W—— for years placed her teeth under the care of Dr. ——. During all the years she went to him he advised her to use nothing but a wet towel to clean her teeth. Even when he saw his filling dropping out one after another, and the teeth decaying all along the gum line, and all going to pieces, he did not read the lesson taught by advising the use of brush and powder, thread, etc. When I spoke of a brush I was told that Dr. — said it would ruin her teeth. It was only after I refused to operate on her teeth unless she would use one, that I got her consent. After two years she is just beginning to see the value of keeping her teeth really clean, for she has paid me for the last year less than a quarter as much as she paid her previous doctor for the last year she was with him.

J. H. REED, Chelsea, Mass.

SHEET WAX.

ED. ITEMS:—I have noticed articles in the Items from time to time on "Making Sheet Wax." They are all good, but I believe I have a better one.

Melt the mixture of wax and paraffine *very slowly* in an oyster can over a small flame. Take a piece of tinned iron 3x7 inches, thoroughly amalgamate both sides with mercury. Dip this into the melted compound, and immediately immerse in cold water; repeat both operations till the coating is as thick as desired. If the water is too cold the sheet will be apt to crack in removing it from the tin. Thin sheets are better than thick ones, as they are more easily warmed up and adapted to a model, and several of them can be used instead of one that is thick. After the case has been waxed up and smoothed off, a very thin sheet can be spread over the whole surface, having the side that was in contact with the tin uppermost, and if the case is carefully invested, the lingual surface will, when vulcanized, rarely require a scraper, as a piece of 2½ sand paper, followed by finer grades, will soon smooth up the surface.

Any wax remaining in the can can be poured into blacking-box lids that have been cleaned and treated with mercury. These cakes are very convenient for taking "bites," &c.

WM. D. KEMPTON, Cincinnati, O.

A STRANGE COINCIDENCE.

Ed. ITEMS:—On looking over your February number I was struck with the familiar sound of what G. H. Kellenberger says, on page 68, in regard to polishing rubber plates. The coincidence is in the fact that what he says is almost word for word, the same as what first appeared in the ITEMS for May, 1885, on page 263, over my signature.

Another strange feature is that in K——'s article a mistake occurs which will be found in mine, being a comma after the word "felt," which is out of place. I think if I were to appropriate another's article, I would certainly leave out mistakes, and try and change the wording as much as possible to avoid exposure. A better way would be to give credit to whom it belongs.

The following I had prepared, after reading a request, for a method of polishing rubber plates made in the ITEMS for Dec. 1885, but neglected sending it till reading the article above referred to.

W. C. BUNKER, St. Marys, O.

A FEW POINTS WORTH REMEMBERING.

DR. W. C. BUNKER, OREGON, ILL.

POLISHING RUBBER PLATES.

I notice in the December number of the ITEMS, "F" asks for a method of polishing rubber plates, and asks if special instruments are needed. As a reply, I would refer him to page 263 of the ITEMS for May, 1885,* and say that the method there described was discovered by me accidentally eight years ago.

I was at work on a plate and spilled some dry plaster on it, my fingers happend to have some oil on them that was spilled at the same time. I was talking with some one, and thoughtlessly commenced rubbing the plate, which I found to produce a good polish. I kept at it till the whole plate was polished nicely, and have used this method ever since.

TO PREPARE FOR AN IMPRESSION.

If there are remaining in the mouth a sufficient number of teeth to show the general character and expression, shape, etc., which it is always

* The following is Dr. Bunker's process as described in the ITEMS of May, 1885.

"After the usual filing, scraping, and sand-papering, comes, of course, the felt, buff, and pulverized pumice. Then, instead of a brush wheel and the usual method, I wash and wipe dry the plate; take it in the left hand with the concave side up, put on three or four drops of oil—not more—then about a teaspoonful of dry plaster, and with the thumb of the right hand rub it over the plate briskly, and in one minute's time you will produce a polish that can't be equalled with the lathe. Polish above the gums in the same way, using the fore-fingers full length, instead of the thumb; wash the plate with soap and water, then use a little alcohol to remove any grease."

desirable to reproduce, though sometimes in a modified form with the artificial set, then before extracting for new teeth, I take an impression, using wax. I am not always careful to get a very complete impression, as it is only necessary to show where the teeth stood. After extracting the teeth I arrange them carefully in their proper places in the impression, then fill up with the plaster same as I would in making a cast, covering the roots entirely. When hard, I remove the wax. You have discovered before reading this far of what value such a cast would be to refer to when setting the new teeth.

I use plain teeth whenever I can, and would almost as soon do without the bite as to do without this cast with natural teeth in place in it.

SHARPENING CORUNDUM WHEELS.

I find after using a while, my corundum wheels seem to be glazed and do not take hold and cut as readily as they used to.

One day, when particularly bothered, I suddenly remembered that the wheels were made with shellac. Alcohol is a solvent. I placed the wheel in a horizontal position poured a spoonful of it on, then using a stiff brush scrubbed the face of the wheel, laid it aside to dry thoroughly, and when I used it again found it nearly equal to a new one. This can be done as often as they get dull being careful not to use till thoroughly dry.

REPAIRING A CRACKED PLATE.

Occasionally I have to repair a cracked plate, whenever I do, I use what is known to jewelers as earring wire—it is a brass wire gold plated—I proceed in the usual way till about to pack in the new rubber, when I make a hole sufficiently large to receive the wire each side of the crack as far away from the crack as the outer edge of the patch, then take a piece of the wire and bend one end at a right angle; get the distance between the holes and cut the wire to the proper length and bend the other end at a right angle, also making a broad staple. I put the ends in the holes letting them go clear through the plate unless it is quite thick, then pack the rubber over and proceed as usual. If the wire projects through the plate cut or file it off.

In this way a plate may be repaired and be as thin when done as it was originally, and stronger; thus avoiding a clumsy patch. Two or more of such staples may be put in as the case demands. This method was given me by Dr. Abbott, of Dwight, Ill.

Women govern us; let us do all we can to make them perfect. The more they are enlightened, so much the more we shall be. On the cultivation of the minds of women depends the wisdom of man.

A VETERAN SPEAKETH.

GRINDING AND POLISHING DISKS.

For more than ten years I have made my own plug finishing disks and cones. First I used rubber as a base for emery and other powders, but found a good deal of difficulty in thoroughly mixing the various powders with this material. At last I found a perfect and easy working material in vulcanizable gutta percha, which I had obtained in the days of "Bacon." By heating with hot water you can manipulate this substance to your entire satisfaction, and easily incorporate therein whatever kind of powder you may desire.

To mix, take one-quarter of a sheet of gutta percha, heat well in hot water, take out dry on cloth, then spread over on one side a thick layer of emery or other powder, then fold the piece once over the emery and press the edges tightly together, so that no powder can escape and heat. Again take out and dry, and quickly press together with hands, and when well worked, flatten out and apply powder as before. Repeat this process till you have worked in a sufficient quantity. If you have proceeded according to directions scarcely any of the powder will be lost by heating in hot water. In the same way mix any polishing powders you may desire.

I have found two grades of flour of emery and one of pumice and whitening to answer every purpose. The last I use for final polish and a burnisher, and it leaves a more glaring surface than anything else I have ever used.

It is unnecessary to describe forms and sizes. These will suggest themselves. Now to mold, vulcanize and finish. Having a proper lathe I turn all my patterns, but you can take any suitable material, as wood or hard plaster, and shape them by hand, but be sure to center every pattern. When patterns are done and oiled, fill lower part of flask with plaster, smooth well the surface, and quickly imbed your patterns, but not below the surface.

Now oil well, apply and fill the other parts of flask, and when well set, separate and carefully remove patterns. To avoid the very difficult task of drilling center holes in the emery disks, take brass wire of suitable size, sharpen well one end, and cut off a piece one-half inch long, force the pointed end into the center of the mold as marked by pattern; do not leave the pin above the surface of plaster. Now carefully pack, boil and force flask together, and vulcanize, say about ten minutes longer than you would rubber. I finish all on my lathe, but this can be done after mounting in the dental engine, using coarse and fine files. To mount, warm well the screw end of engine mandrel, and insert into center hole of disk, and quickly turn to shoulder. If the hole in the disk has not been left too large you will find you have obtained a solid

adjustment, so that turn whichever way you please the wheels will not come off.

In using, keep well wet with water. I advise every one to obtain a sheet of vulcanizable gutta percha. Besides for the above purpose, out of it you can cut the best soft disks ever yet used by the profession.

D. C. ESTES.

SAVING PULPLESS TEETH.

DR. J. J. WILLIAMS, BALTIMORE, MD.

I have read with pleasure the articles in the *ITEMS* of February, entitled, "Effects of pulpless teeth when left in the jaw." This has been a subject of interest to me for many years, and one in which I have had quite a long and successful experience. I agree with the remarks made by Dr. J. Morgan Howe in the discussion and I am sorry Dr. Sexton got hold of such unsatisfactory cases. I do not deny that teeth are not factors in reflex disturbances, (pulpless teeth especially); but a pulpless tooth can be put in such a healthy condition as not to act as a factor in any reflex disturbance. I have seen teeth that had been treated and filled by other dentists, which had been kept in the mouth for years without giving any trouble directly or indirectly, and I have filled many that have never given the slightest trouble. I have a lady patient in my hands now, that came to me twelve or thirteen years ago, very much run down in health, with her nervous system prostrated and having four or five pulpless teeth in her mouth, three of which were badly abscessed, her face much swollen. I lanced the gums over the offending teeth and began a course of treatment which in time put her teeth in a healthy condition. I then filled all five, and they have never since given her trouble. I have seen her several times a year, since I filled the teeth, and they are still standing. I could cite a number of similar cases if necessary. A pulpless tooth left to itself, and not attended to, is very often a source of much trouble and annoyance and more especially one which has been filled, as I have often seen them, by merely putting a piece of cotton saturated with some disinfectant in the cavity and filling over it and leaving the fangs empty. This is all wrong and no tooth can be saved in this way—neither can a tooth be hurriedly treated, even after destroying the nerve, and filled so as not to cause future trouble. It must be rendered aseptic, and this cannot be done in two or three treatments. It is impossible even with the greatest care and skill to save every pulpless tooth, but with proper treatment we can save the majority, and that without trouble from reflex action. We must make it a study to save all teeth and even roots which by any means can be restored to a healthy condition.

DANGER OF THE MALLET,—AMALGAM,—ARTIFICIAL CROWNS.

DR. W. G. A. BONWILL, PHILADELPHIA.

The mallet was the legitimate outgrowth of cohesive foil, and on its heels came stupendous bankruptcies. When I brought out the electric-mallet I fancied there was nothing left for me to do but sit still beside my patient and direct its magic blows. I felt that I could build a *tower of Babel* to reach the heaven of dentistry. It looked as if we could create a tooth and imbue it with new life; that it was impossible to fail with it. But, as great a God-send as it was in preserving our physical and mental health, saving time, and in the perfection of making one piece of gold adhere to another till a solid mass could be formed, "confusion of tongues" came at last. There is a limit to human probabilities and possibilities. It will not do to have an instrument that is divine unless we know its true zenith and our capacity. Where was the fault? It was my attempt to do too much by attaching to weak walls, unsupported by dentine and a thorough base, such towering crowns as my confidence led me to make with that mallet, with the desire to sacrifice no tooth for an artificial one. "I built well, but not wisely." Similar disasters have occurred to the civil engineer, where he has miscalculated the strength of his base and the material used.

This is justifiable to an extent, since all human efforts are perfected by failures occurring, and progress made by their investigation, till the laws governing them are fully discovered. I built up everything at first, till necessity drove me to look round for something better and more in keeping with the artistic architecture demanded in the mouth. My failure was not the loss of many such pyramids; but such operations so multiplied on my hands, that their cost forbid their execution; and, notwithstanding the saving of fully two-thirds of my time and labor by the use of the automatic mallet, the wear and tear on my nervous system was too great. I was obliged to ask whether some other plan would not be easier, and be equally lasting, and enable all to have its benefits.

It was not long before I saw my way clear. It seemed a great humiliation to throw aside the use of gold, which, with our present appliances, we can pack into any tooth anywhere in the arch, wherever a fulcrum can be had, and feel sure of success. How could I destroy so largely the usefulness of my pet? Amalgam came to my rescue, and I am thankful for it, though it is not all we would have, it is so far improved from the discussions of the last decade, that it is lovely compared to what it was.

I use my best efforts in preparing all cavities, as if all were worthy of gold, and fully destroy all capillary tendency of the dentos, to suck up the semi-fluids, starch, sugar, &c., so that I am happy in knowing the result will be favorable.

But, amalgam, as good as it is, we carry too far without looking round for a substitute which would make the operation more sightly and artistic.

Just here, again, came my relief—pivoting crowns on any teeth, in either arch, that would be nearly or quite equal, to the lost one, and be far less expensive.

Now for my failures in this branch. When, in 1871, I placed on my first pivot with gold-pin gold backings, and a nut to screw a crown on the root, I used gold foil to pack around the pin in the root. I found it impracticable to thoroughly condense the foil at the apex end of the gold pin, to secure it, without cutting away too much of solid tooth bone, and destroying the integrity of the root. With many roots it was a failure. Bicuspid and molars could not be replaced with any certainty, and then only at great expense. I tried oxychloride as far back as 1862, and gutta-percha, for retaining metal pins, but could not rely on them as then made.

Amalgam suggested itself for fixing a platina pin in roots. Not knowing whether it would injure the system or not, I, in a case of emergency, tried it, and waited results. It met the issue well, and since 1874 I have, with few exceptions, used it in firmly retaining every platina pin. And now, after many experiments, having a porcelain crown that every operator can set, without any gold backings, nuts or screws (as easily as by the old plan of wood pivoting), I feel prepared to practice dentistry as a fine art, depending on the "cursed amalgam" as the bond of union between root and crown, in conjunction with a simple metal pin, sharpened at each end and barbed on the surfaces.

The first plan I instituted, where a threaded pin was securely fixed in the root, and the plate-tooth backed up after the natural palatal contour, with a nut to fasten it on, seemed to the dental world at large such a mechanical effort as to forbid its going into general use, even for incisors. This later effort is, I think, another practical step in placing a means in your hands for wider application, that will insure quite every healthy root remaining in the mouth, and prevent the destruction of many human teeth now extracted for artificial dentures. Besides, it will enable us to correct many cases of irregularity where otherwise almost impossible, and certainly not judicious, to undertake. This is by cutting off the distorted crown, removing the pulp, and by the nut and screw method, (see "Cosmos," August, 1880,) we can easily extend the plate from the root to a plate-tooth, in normal position, and fasten it securely to the root. In case of accident or for repair it can easily be removed.

Being so sure of perfect cleanliness and security, for a great length of time, I have no hesitation in sacrificing any distorted or blackened crown among the incisors, and sometimes bicuspid, even if I have to

remove the living pulp, where such great deformity is a source of unpleasantness to the patient.

To substitute a crown that will be equal in security to any tooth in the mouth, and be a source of joy and pleasure to my patient, who has not for years enjoyed a good hearty laugh, is more than I can refuse, even if it does look like a sacrifice, or a piece of vandalism. Of all the operations I have performed, none give my patients so much joy, and none which has linked them in love with me so closely as this. So self satisfying is it to their vanity, that they fail to keep it a secret, they reveal it to friends.—*Odontological Society of Pennsylvania.*

THE TEETH.—EXPRESSION AND MASTICATION.

DR. C. P. FITCH, PHILADELPHIA.

The teeth present two aspects, viz.: Expression and Mastification.

The first has reference to one of a group of features, the natural completeness of which renders the countenance agreeable, and when harmonious in color, form, and size, presents a pleasing aspect, but when marred and fragmentary, renders the face hideous and repulsive.

The second has reference, in a physiological sense, to one of a series of acts which constitute digestion, the normal function of which is essentially necessary to health, even to life itself.

Without a proper comminution of the food, which should be performed by the teeth, we need not expect a continuance of health, even when coupled with a good constitution; and the harmonious maintenance of these physical acts which change solids to fluids, and render them capable of assimilation and nutrition, cannot be secured.

As important as are the teeth, and as necessary as is their preservation, viewed in these two aspects, yet the subject is but partially comprehended, or, if understood, it is much ignored and disregarded by thousands. A want of cleanliness and attention to these beautiful and highly useful organs, marks the habits of hundreds from the commencement to the close of the year. A trifling expenditure of time and means would preserve them and enhance the comfort and happiness of the individual; but deprived of them, expression, beauty, and health are marred, if not entirely sacrificed. How many are met with in every community who bear about the filthy and disgusting relics of a former beautiful dental organism.

Others, again, deem it important only to preserve the front, allowing the molars and bicusps to decay and crumble away. How very strange this infatuation; as though the maintenance of expression about the inlet of the oral cavity was sufficient! Disastrous physical results are sure to follow the loss of the back teeth.

PROFESSIONAL JEALOUSY.

[Editorial in *Medical and Dental Journal*.]

On full consideration we have concluded not to moralize on the unprettiness of jealousy, *per se*, but merely to offer a few humble suggestions as to the exercise of intelligence, tact, and discretion, in managing this vice. To feel no rancorous uprisings when a rival enters the field of one's professional labors, and diverts attention (not to say dollars) from oneself, is an indication of magnanimity such as few of us can claim to feel. It is at such a crisis that two or more professional men frequently set about, unwittingly, to undermine, not each the others prospects, but each his own prospects, of gaining or retaining a hold on public sympathy and confidence. The new-comer has every advantage in opportunities he finds for criticizing the work of his established rival; so he sets about by cunning inuendoes or open denunciation to undermine the confidence of his patrons in him. This comes to the ears of the established rival, and he retaliates by calling his slanderer a quack. It makes little difference which is the aggressor or which is the quack; the result is the same in the majority of instances, to-wit: injury to both participants. If the charge of empiricism brought against the established dentist is true, his best rejoinder lies in a dignified silence; if it is false, a dignified silence is still his best defense. The assaulting party is, ten to one, the real quack; for it is usually either a consciousness of deficiency or else a selfish disregard of the right of others, that prompts a man to slanderously assail his competitors. Whatever is the impelling motive, the aggressor is fairly certain to compromise himself in the esteem of those he seeks to win. Assuming that the party attacked is competent in his profession and deserving of the confidence reposed in him, he has nothing to lose by keeping silent. The selfish, greedy, unscrupulous quack has certain advantages in dealing with credulous people, which it is not worth the while of honest, conscientious men to attempt to neutralize in any other way than by a counter example of honest, faithful service toward all who give them preference. We are inclined to think that the father of lies was for once sincere when he offered all the kingdoms of the world to our Lord Jesus Christ as a reward for the worship he craved. At all events, the devil's minions, whose characteristic traits are deceit, treachery, and dishonesty, certainly possess a large share of the earth, and beguile the children of men, fattening on their woes at this day, as in the days of Christ. It follows, then, that honest men have no thoroughly effectual or satisfactory course open to them for suppressing quackery entirely.

The quack is usually determined to succeed in making money, and he usually does succeed. You cannot win his patients away from

him if you stoop to try it. The medical profession sets us an example of handling this question that is worth imitating. They let the quack alone, as a general thing. The quack cancer-doctor wins high renown for curing benign tumors and cysts which he describes to his patients as malignant. The hundred or two dollars fee which the patient pays him is often an effectual barrier to the entrance of truth such as the family physician might whisper into his ear, if he chose so to do. [When a man has paid three hundred dollars for an oil painting he hates to be told that it is a chromo.]

But sometimes it happens that neither party to the controversy is a quack; one is simply more enterprising and energetic than the other. The new-comer, perhaps, fits up an office in a style far surpassing any office in town, he joins a fashionable church, pushes himself into the best society, wears good clothes and make more acquaintances in a week than his old established rival makes in a year. Presently it becomes noised about that he is really a superior dentist, and people flock to him and pay larger fees than any of the old established dentist ever thought of charging. The new dentist is perhaps aggressive only in the fact that he does better work than the other dentists. Then the whispering and back-biting usually comes from the other side. The older dentists are forced to swallow their resentment and mortification, and confess to themselves that they might profitably go to school to the new-comer. This is an extreme instance, we admit. The number of young practitioners whose attainments are sufficient to offset the advantages of longer experience, such as their elders can boast, is probably small. But the advent of such a man as above described, is apt to lead to a war of words, and recourse is had to means sometimes fair, but too often foul, to overthrow the intruder. The inferior dentist perhaps sets about to advertise his incompetency by beginning a game of "cut-throat," and a general row ensues, in which each gets the other by the ears, and,—the public sits quietly by, waiting its opportunity to make the most possible of it.

Happily this undignified scramble for patronage, this servile cheapening of one's professional services—as if such services were a species of merchandise to be got rid of by a clearance sale—is less conspicuous in large communities. There is no analogy between professional services, and mercantile transactions; all this the appreciative classes in every community (on whom professional men must depend) understand well. Still, if any man chooses to become a missionary, in a professional capacity, among a non-appreciative class, that is his own business. That need not interfere with any other professional man's unquestionable-right to require adequate compensation for his services. To such as find themselves compelled to make an honest living out of their professional labors, the following observations are addressed :

Cultivate a community of interests, as lawyers do with so much good effect. In the larger cities and towns we find the lawyers flocking together and forming little communities. In a single building convenient to law libraries and court records you will find thirty or forty lawyers' offices. But there are other advantages than the above alluded to, that are not immediately obvious to outsiders. There is an important advantage in the mere external appearance of a combination of forces. The fact that competition for patronage must ever exist, is a fact accepted, and being accepted, measures are taken to provide for fair and just restrictions on abuses. This may appear only in certain negative features, still there is unquestionably an undefined bond of unity, among lawyers which carries to the public mind and impresses on it a sense of their self-respect as a body collective. In open court members may quarrel and wrangle,—not about fees, however,—and yet no personal antagonism results to affect their standing in the respect of their clientage. The lawyer is a "member of the bar," in the town or county where he practices. That fact gives him prestige. All stand banded on a common platform.

If dentists were to adopt some such plan for securing unity, what advantages might be expected to follow? The appearance of harmony and self-respect would inevitably commend more uniform respect from their patrons. There would be all the moral effect of an association of effort, of wide-awake, progressive tendencies, of wholesome emulation. Instead of drifting apart and fostering prejudices which lead to alienation, dentists would act together to promote the interests of the body collective, and would soon learn that thus individual interests are best subserved. Every dentist would feel a new incentive to do his best, such as he probably did not feel when his nearest professional brother was five blocks away.

Already this tendency to centralization is beginning to be felt in large cities. An instinctive feeling prevails that it is best to seek a location in certain districts where established dentists congregate. Among physicians, who must go to their patients as well as be visited by them, this tendency is less noticeable.

DENTAL—LEGAL EVIDENCE.

A dentist's bill, receipted and describing the character of work done in Prellar's teeth, in 1878, has been found among Prellar's effects. The dentist has been found and says he could identify the dental work referred to, and now the dentist is to be summoned to St. Louis as an expert in identifying the remains that are both alleged and denied to be those of Prellar. This is another proof of the importance of dentists keeping a specific record of dental work.

USE OF THE BLOW-PIPE.

DR. L. P. HASKELL, CHICAGO.

However much the student may use an automatic blow-pipe, of any kind, he should become thoroughly familiar with the *mouth* blow-pipe. Unfortunately many never seem to acquire the art of blowing a continuous blast.

The first step is to procure a *proper* blow-pipe. This unfortunately is difficult. I have endeavored to get dental supply manufacturers to furnish such, but as yet without avail; why I do not know. The blow-pipe furnished for dental use, is the same used by jewelers, whose requirements are entirely different, they using much lower grade solders; small articles to solder, and not inserted, as a set of teeth must be, in plaster and sand, or asbestos. The small blast will suffice for them. Dentists require a larger flame, and stronger, fuller blast.

The dental blow-pipe should be at least 12 inches long, so as not to bring the face too near the heat. The mouth aperture should be at least $\frac{5}{8}$ inches in diameter, and the blast aperture $\frac{1}{8}$ inch.

The mouth-piece should *rest against* the lips, for if taken inside, the effort to close around it tires the muscles. The pipe should be held so as to take in the whole blaze, in *heating up*.

But blowing a continuous blast, involves not only the lips and cheeks, but of equal importance, the diaphragm. This must be kept partially distended all the time, for here is the reservoir of supply, and the moment that collapses, one must stop and take a fresh supply of air.

The use of the mouth blow-pipe is very beneficial to the lungs, if used intelligently, and one thoroughly conversant with it cares little for the foot-bellows, or other appliances.

Gas makes the best blaze, if properly used. The gas-pipe should be in two joints, so as to allow of free motion. The end should be cut square, and fine wire gauze, three or more thickness, wound over it, so as to make a bulb; this breaks the force of the gas, so that it resembles the flame of a lamp, and is easily controlled by the blow-pipe.

MOUNT FOREST, ONT., Feb. 17th, 1886.

Ed. ITEMS:—Would you please suggest in the columns of the "ITEMS" the best treatment for a tooth which has been broken off even with the alveolus, when the patient is unwilling to allow it to be extracted, and the pulp living. Is there any way of applying a medical agent to destroy the vitality of the pulp in this condition without affecting surrounding tissues; if so, what remedy would you apply?

CANADIAN.

NINTH NATIONAL MEDICAL CONGRESS.
SECTION ON DENTAL AND ORAL SURGERY.

As there seems to be misapprehension in the minds of some, and earnest enquiry by others as to the status of the Section on Dental and Oral Surgery in the International Medical Congress to be held in Washington, D. C., in 1887; it seems proper that some statement be now made in regard to the organization and progress of the work.

It is generally known that the section has been established and organized; the following officers have been appointed; viz: a President, one Vice-President and two Secretaries.

Fourteen gentlemen of recognized ability and high professional standing, from various parts of the country, have accepted positions in the Council, and have pledged themselves to do all they can to make this Section a success. At the next meeting of the Executive Committee, ten or twelve more names will be added to the Council, as may be seen best. Much of the preliminary work in arranging the matters of the Section has been in the main accomplished.

A program embracing subjects of great interest to the profession of the world, has been outlined and is now under consideration; and as soon as completed, the secretaries will open correspondence with eminent men of the profession in Europe and America, relative to the work to be done. Quite a number have already indicated a desire to prepare papers, or at least, to take some part in the work.

We not only expect but are assured that this Section will receive the hearty support and co-operation of dental specialists, both at home and abroad; and with such manifestations, great hope is entertained that the Section will be eminently successful. We ask for it the co operation of all who have the best interests of our profession at heart.

A circular will ere long be issued by the Executive Committee giving status of the preparatory work for Congress.

J. TAFT, Pres. of the Dental Section.

Spasms and the Teeth.—ED. ITEMS:—Six months ago I was called in consultation with one of our leading physicians. The case was that of a little girl, six years old. The day before they called me she had three spasms. The doctor said she had a brain affection, and was treating her according to his diagnosis of the case.

Well, I met the doctor at the hour agreed on, and proceeded to look into the cause of the child's misery. The first step was to look at her teeth. I found the whole trouble came from two badly ulcerated teeth in the upper jaw. I extracted them at once. The little girl was up and all right in a few days.

C. W. PURSELL, St. Marys, O.

THE OPERATIVE vs THE MECHANICAL.

It is not because mechanical dentistry is less thought of than formerly that it does not receive as much attention, but rather because a higher appreciation is set on the natural teeth, and greater effort is made in the direction of saving them; in proportion as dentists succeed in saving teeth they give less attention to their substitutes. Yet as a dentist is called on to practice operative and mechanical dentistry he should be prepared to do his best in both. It is not given to all to be perfect in both; some excel in one branch only. There is a good deal in native ability. A man who can concentrate his power on one thing, who can command every faculty and acquirement, and bring them to bear on the performance of whatever he undertakes, is sure to succeed. It is better for the majority to confine themselves to one or the other branch, because the field in either is wide enough to draw out his ability, and to occupy his time. The mechanical branch has become much demoralized in late years. What is its object? Not only to supply the loss of the teeth, but to restore the contour of the face, and to restore the function of the teeth. The great majority of rubber sets fail to do this. So little care is taken in making them, that the workman might just as well do the work without ever looking into the patient's mouth. No attention is given the several conditions required. For example, see the miserable manner in which enunciation is secured. Indeed, so poor is this, we can tell by the mumbling at midnight that the person wears a bad artificial set. Yet teeth can be made so as to restore the speech. But what is to be done to effect this desirable result? It consists in going down to the bottom, and requiring of dentists a knowledge of the fundamental principles. Where is the man with a grain of sense, who would call a man an artist, who painted a portrait of a loved one with the nose turned one way, and the mouth another, much less take it for a likeness? Oh, but some might take it because it is cheap! Very well, that might do with some; but it is not the right way in art, nor should it be in dentistry.—*J. Taft.*

Ed. ITEMS:—In February number of "ITEMS," page 74, "Sensitive Dentine," Prof. Flagg, says: "If, in excavating a cavity the dentine is sensitive, by under-grooving, the tubuli being cut at their base, no sensation can be transmitted to the pulp." You say, "this may be a fine theory, but in practice it is not true in your experience."

I find in my practice that, by under-grooving, or cutting of the tubuli at the base, *will* destroy sensibility so that, extremely sensitive dentine before, may be excavated quite comfortably as deep, or nearly so, as the groove, owing to the direction the tubuli run, position, size of cavity, etc.

C. A. BILLINGS, Marshalltown, Iowa.

PATERSON, N. J., February 4th, 1886.

Editor ITEMS OF INTEREST: — Having carefully read the "Items of Interest" for February, I am impressed by the many very good things it contains. While on the other hand, I am pained to see men in this enlightened age write such trash for a dental Journal. I refer principally to Dr. Van Horne's "interesting case in practice." A lad of fifteen summers is minus his superior laterals, and all because his grandfather had his laterals extracted to make room for his canines. Is this not proof, says the Doctor that we have labored toward deformity of future generations in trying to remedy present irregularities by extraction? According to this theory it is a most fortunate thing for that lad, that his grandfather did not have all his teeth extracted, or else the poor boy might have had to "gummed" it.

It is a poor rule that won't work both ways. If we are to inherit mechanical deformities why won't it extend to our limbs as well as to our teeth? And if so, what is to prevent the government from having pensioners, as long as the world last?

The learned Doctor also informs us that, expanding the arch is the *only* true way to regulate crowded teeth. Circumstances may alter cases. The word "only" is badly placed.

W. H. PRUDEN, Paterson, N. J.

Mounting Crowns.—Ed. ITEMS:—My favorite crown is Bonwill's; it is the easiest adjusted, and most durable when properly mounted. My mode of mounting is to use notched piano wire. Ream the nerve canal, and set the pin with oxyphosphate; adjust the crown to the root and pin, and fasten with oxyphosphate; take some Plaster Paris and sit it over the crown and the two adjoining teeth to hold the crown in its proper place till the oxyphosphate is entirely hard, then remove the plaster and trim the tooth till it matches with its mate, and you will have a tooth which is perfect and durable.

R. E. HENSHIE, D. D. S., Hillsboro, Ill.

Combination of Gold and Tin.—When the two metals, gold and tin, are used in the same filling, I prefer that they be combined; that is, the two foils mixed or twisted together and inserted in this relation to each other. There seems to follow a peculiar union of the metals, something like an amalgamation of them, for when such fillings are removed after having been worn a number of years, we find this union such that the two metals cannot be separated mechanically. At any rate it is a good filling, and we advise our brethren to try it.—*W. W. Seepert.*

SAVING TEETH.

E. P. BEADLES, D. D. S.

I often surprise my patients by saying that, if I could avoid it, I would never make another set of artificial teeth, and at the same time asserting that if people were to do their duty, and at the same time dentists were to do *their* duty, there would be little necessity for teeth of substitution. It is a sad fact that so many men withhold the advice that should be given, in order to obtain the dollar which they see just ahead of them. Now, this is nothing more nor less than criminal. Our first duty should be to our patients—our highest aim and ambition to give them the very best of our knowledge and experience, whether it swells our pocket books or not. It is no less criminal for a physician to keep a patient down in bed for several weeks longer than is necessary, in order to make larger bill.

I make it a rule *never* to extract a tooth, if there is the least chance to save it, unless, of course, under exceptional circumstances.

I shall not go into the discussion of *how* we shall save the teeth, but let our motto be, *Save every tooth possible*. Let us always endeavor to impress on the minds of our patients the great necessity of preserving their teeth, pointing out to them the evils resulting from neglect, especially *wilful* neglect. It is too bad that so many deliberately allow their teeth to decay, to obtain a prettier set, or to avoid the cost of repair. Not one in twenty seems to realize the importance of their teeth till they are lost. I have heard many men say, "A tooth of mine never aches long, if I can get to a dentist." The tooth is extracted. Well, one is not much missed, and when a second aches, the forceps are resorted to again; but, by and by as one after another are shamefully thrown away, then he realizes his folly.

Now, the question is, how are people to be made to realize the importance of good teeth, and the sin of allowing the ravages of caries to destroy them? By the dentist conscientiously doing his duty, both in talking and in writing about the subject.

In everything we are compelled to make them *think* before we can get them to *act*. Hence it is our duty, as servants of the public, to warn them on this subject; pointing them to the experience of others, and, in every way possible, teaching them their duty to themselves and to their posterity.

Yes, this is indeed a growing evil, and avoid it we must, if we are, in any sort of a sense, what we should be as a profession. I repeat, many of our people are getting it into their heads that it is the duty of the dentist to *make* teeth for them, rather than preserve those which they have.—*Southern Dental Journal*.

THE SIZE OF ARTIFICIAL TEETH.

PROF. L. C. INGERSOLL, OF THE UNIVERSITY OF IOWA.

I was recently numbered as the eighth dentist who had made a set of teeth for a lady, who reported that every one of the seven preceding dentists had made for her teeth much smaller than her natural teeth, and out of all proportion to the other features of her face. The set she wore when she came to my office was mechanically well made; in fact was a model of mechanical neatness and adaptation to both jaws. But they were "beautifully white" and "beautifully small." The lower set was her natural teeth and gave clear indication of the color of teeth in natural harmony with her complexion, hair and eyes, which the dentist had disregarded. They gave indication, also, of a very symmetrical countenance, harmonizing in size with the other features of the face. The small teeth which had been set were so out of proportion with the lower teeth as to attract attention of any observing person, and so out of proportion to the size of her mouth that in laughing she displayed the full size of the first molar. The smaller the size of the teeth the larger the number brought to view. The effect is "a mouth full of teeth." A handsome mouth will not display the molars at the corners, nor any further back than the anterior surfaces of the second bicuspid. Account must be taken of this in selecting teeth as to size and spaces between. If the natural teeth are much crowded, and overlapping each other, it is an indication of a want of observance of the law of proportion by nature herself—the teeth being too large for the jaw. In such a case it may be necessary to put in artificial teeth smaller than the natural size.

We may find small teeth set in a broad, arched jaw, with spaces of considerable width between the teeth. In supplying artificial teeth in such a mouth, the law of proportion and beauty would require that teeth be selected larger than natural so as more completely to fill the arch of the jaw.

In some mouths the natural teeth are too short for their width; others too long and narrow for beauty. In the one case the mouth is shut so closely as to destroy the curvature of the lips, or to roll the lips outward, displaying too fully the red lining of the mouth. When a patient is presented, having lost all teeth from the mouth, it becomes a careful and critical study to know the form, color and size of teeth that will give the best form to the features and the most pleasing expression of countenance. It is very gratifying to the careful student of artistic and esthetic dentistry, after having spent an hour or two in the study of the countenance, trying one sample of teeth, and another, and another, to find the set that will produce the most pleasing and natural effect, and having unhesitatingly come to the conclusion that he has

found the teeth that will reproduce the normal expression of countenance, to hear his patient say, "those look precisely like my natural teeth."

In selecting the shade of color the dentist must know that the natural tints are numbered by hundreds, each having something to do in the realization of harmony and beauty. It is not my purpose here to speak of harmony of color, further than to call attention to the fact that there is a law of harmony which should be observed. Color in the teeth should harmonize with color elsewhere in the countenance—with the color of the skin, hair and eyes. Harmony of color is one of the chief elements of beauty.

The law of proportion demands that the teeth shall harmonize with the other features of the face as to size. Account must be made of the whole anatomy of the person; but specially of the osseous structure. The whole figure and form of the person may be large, yet so made of fat and muscle as not to indicate the person was once the possessor of correspondingly large teeth. It is a noticeable fact that persons tending to flesh evenly distributed over the body usually have small features and small teeth; while the lean and cadaverous person may be large-boned, with large features, and usually the possessor of large teeth. It should be remembered that teeth are part of the *skeleton*, and sustain harmonious relations to the bony structure. In examining your patient, therefore, with reference to a selection of teeth of a suitable size, look through the soft part to the underlying skeleton—observe specially those parts most thinly covered with soft tissue—the lower jaw, the nose, and the hands. If the bone structure is large, it means large teeth, to harmonize the frame-work of the body.

The large majority of those applying for prosthetic dentistry come to us not toothless but having at least a few teeth in the mouth. Under such circumstances every dentist, of any thought on the subject, conceives it his duty to match the teeth remaining. But, from the deformed and ghastly appearance of so many mouths in which are placed artificial teeth, we may well consider that very few dentists ever make a study of dental art, or if they attempt it, they have arrived at no standards by which they judge of natural forms and expression.

Most patients come with the anterior teeth remaining on the lower jaw. The average dentist will take from his case two or three sets of teeth designed for the upper jaw, and show them to his patient, and say, "There is a pretty set of teeth, and there, and there; take which you prefer." Or, taking the responsibility upon himself, will make a selection of such as can be made to fit the gum with the least grinding. If one or two teeth only are to be set, he will consider that *filling the space* is the matter of chief concern. If the vacancy in the dental arch

was made by the extraction of two teeth, he feels bound to replace two ; both for the better price and for the additional reason that two teeth have been lost from there, even though, after the lapse of years, the space is so narrow as to admit of but *one* tooth of the natural size. You will often see such artificial deformities, in replacing incisor teeth, both above and below. Two incisors are often placed on the lower jaw so unnaturally small as to attract attention of the commonest observer, simply because two teeth had been extracted from that locality, whereas, if *one* tooth of natural size had been placed there, the slight space left on either side would not have been noticed as anything unnatural, and, therefore, would not have attracted observation at all.

The length of teeth has also much to do in preserving and also in restoring the contour of the features. When the natural teeth are worn down, as they sometimes are, to half or one-third their normal length, the whole face is shortened just that much. The mould of the lips and the whole expression of the mouth is changed.

We see artificial teeth in the mouth that are so short they are not to be seen in ordinary conversation, which detracts very much from the expression of the mouth. But hiding the teeth from sight is not the worst evil of short teeth. A disagreeable deformity of the jaws may be the result. With every change in the length of teeth there is a change in the occlusion of the jaws.

As the lower jaw approaches the upper, the teeth do not move in vertical line upward ; for, while the lower jaw moves upward it also moves forward. This fact has proved a source of great annoyance to dentists, who sometimes have not been able to explain it, and therefore have not been able to remedy the difficulty. For example, a full upper and lower denture is placed in the mouth of a patient whose lower jaw had been greatly injured by destruction of the gums and alveolar processes before the teeth were extracted, leaving, however, in the interspaces thick masses of gum tissue and pointed septa of the process on which the lower plate of teeth must rest. In such a mouth the absorption is usually very great, even if by a surgical operation the superfluous gum and the projecting points of bone are removed, as in such cases is always best. By the absorption that takes place the lower plate settles so that the teeth are shorter than when first placed in the mouth—not, of course, really so, but shorter relatively to the other teeth and to the parting of the jaws ; for, by the settling of the lower plate, the occlusion of the teeth brings the upper and lower jaws nearer together. Then, furthermore, by this nearer approach, the lower jaw is moved forward so as to change the antagonism of the upper and lower teeth with each other. When the denture was first completed, if constructed properly, the upper incisors closed over and outside of the lower incisors. But after

this shortening process and the consequent protrusion of the lower jaw, the upper incisors are found closed inside the line of the lower incisors, giving the English bull-dog expression to the mouth—a kind of crossness and savageness in appearance quite out of harmony, it may be, with the temper of mind and the amiable disposition of the person.—*Iowa Transactions.*

AMALGAM—ITS USE.

DR. S. F. DUNCAN, WILMINGTON, ILL.

[Read before the Central Illinois Dental Society, Bloomington, October, 1885.]

Though there has been much said pro and con in regard to the use of amalgam for filling teeth, there are few facts we must look squarely in the face and then do the very best we can for our patients under the prevailing circumstances.

So long as we have a poorer class of patrons, we are under obligations to serve them in the most economical way possible. Many of us have patients, who cannot pay the price of operations in gold and yet need our services as badly as those of the wealthier class. In justice to them and ourselves, what better service can we render them than to fill their teeth with amalgam?

We have no other cheap material that will answer the purpose in a large majority of cases; and by carefully preparing the cavity and by properly using the material we can make a reasonable good filling and thus render those patients, whom we have always with us, a service for which they are able to pay and that will reflect on us no discredit.

How shall this be accomplished?

First, the cavity should be as thoroughly prepared as possible; if a deep one it must be lined with oxyphosphate, and specially should this be done if we leave any portion of partially decomposed dentine in the cavity for pulp protection, which is often of great importance. All frail walls and overhanging edges should be cut away. I would not bevel the margins of the cavity as much as for gold filling, as amalgam has not so much edge strength and if thin attenuated edges are left they may chip off, leaving a rough margin which will collect food to decompose and cause further decay.

After the cavity has been thoroughly dried with the warm air syringe, the amalgam as soon as mixed, should be placed in the cavity and packed hard with suitable adapted instruments, for if it is permitted to stand till crystalization has commenced, it will be impossible to make a good filling of it as the mass will not again unite after the crystallizing process has once been disturbed, which I think is one very fruitful cause of failure. In finishing amalgam the same care and thoroughness should be exercised as if the fillings were of gold; and this

can be done at a subsequent sitting, after the filling has thoroughly hardened.

Just here I wish to say a word in regard to the instruction given in our dental colleges, in many of which the use of amalgam is not taught; the faculty, I suppose presuming that any one who can make a good gold filling can also use amalgam successfully without any special instructions in reference to it. Now this is certainly a mistake. The process is in many respects different, and to fill a cavity properly with amalgam is in many cases almost as difficult as to fill it with gold, though not nearly so tedious. I have seen students from dental colleges where the use of amalgam was not taught who could make a fair filling of gold, and yet when an amalgam one was to be inserted the material was mixed into a mere paste and literally plastered into the cavity, no attention whatever being paid to the condensing it or to the proper contour. Such fillings cannot be expected to save teeth, and as a large majority of these students will probably have occasion to fill many teeth for the poorer class of people, it is simply justice to the students and their patients that they be taught in the dental schools how to use amalgam in a proper manner.—*Ohio State Journal*.

Ed. ITEMS: D. D. L. asks what to put in wax to toughen it for base plates. I make very tough wax from one part of paraffine and ten of beeswax.

I cut endless packing for vulcanizer from heavy pasteboard, and think it lasts longer and is equally as good as rubber.

Corn starch is better than stove blacking or soapstone for packing vulcanizers, and it is much nicer to handle.

Two inch tire bolts, which may be bought at hardware stores at the cost of a cent each, by flattening the heads make good bolts for Whitney flasks.

Please give receipt for softening rubber dam for making depressed rubber dam.

J. B. MORGAN, Kokono, Ind.

Farmer (to physician): "If you git out my way, doctor, any time, I wish you'd stop and see my wife. She says she aint feeling' well." *Physician*: "What are some of her symptoms?" *Farmer*: "I dunno. This mornin,' after she had milked the cows, an' fed the stock, an' got breakfast for the hands, an' washed the dishes, an' built a fire under the soft-soap kettle in the lane, an' done a few chores 'bout the house, she complained o' feeling' kinder tired. I shouldn't be surprised if her blood was out of order. I guess she needs a dose of medicine."

PHYSICIANS AS DENTISTS.

DR. WM. H. ATKINSON, NEW YORK.

[Extract of paper read before the Connecticut Valley Association.]

No one can be a safe specialist without the general knowledge in anatomy, physiology, pathology and therapeutics. Neither can any one be a safe general practitioner who has lightly run over any region of the human body. In the light of this last statement then, is it not plain that no M. D. who has not also attained the knowledge indicated by the D. D. S., can by possibility, be entitled to decide cases belonging to dentistry? An examination of the text-books and prescribed courses of study in medical colleges will reveal the fact of the meager attention called to the embryology, histology, nourishment, derangements and treatment of teeth, which must lead to the conclusions that competency to understand the management of the teeth in health and departures therefrom, is by such instructions impossible. Nevertheless nearly every dental enactment for the safety of the people against incompetent dentistry has tacitly or openly acknowledged that graduation as physician, or rather as M. D., entitle the holder of such degree to practice dentistry. A most puerile enactment and flagrant abuse of legislative power, and this, too, endorsed by the very men who favored the enactment of such a code of regulating and legitimizing the practice. Yes! dentists in good practice are guilty of such folly, and have the cheek to wipe their lips and say "we have not sinned."

These are the dentists who occupy chairs in dental colleges and hold their positions by the favor of the very M. D's whom they know to be unable to legitimately diagnose one-fourth of the cases of defective function resulting from tooth trouble. The journals are full of jumped at conclusions of oculists, aurists, laryngologists and general practitioners, of bad eyes, bad ears, larynxes, and general bodily ailments, arising from defective teeth. The only rationale of the matter is that not being able to satisfy themselves of the source of the ailments they saw, their easy virtue led them to make the teeth a scape-goat for their sins of ignorance. Any practitioner of general or special medicine who has not the moral courage, not to be satisfied till he comprehends the case in hand so as to be able to convincingly state it to others, is direlict in duty if he pronounce an opinion or diagnosis, or if he make a prescription. He has not yet arrived at a diagnosis of the case. If he is not conscious of being authority, he is sure to seek that authority outside of himself, in consultation of books or men, as authority on the subject. But this means not only extensive reading, but thought, and hard study, and independent investigation; and it is this studious, independent class of men we want in our profession, who will come up to this standard.—*Archives*.

OUR CURRENT LITERATURE.

S. W. LAKIN, EUREKA, CAL.

Usually, the greatest objection to descriptive papers appearing in the various journals is their extreme length and diverse thoughts. In many instances whole pages are devoted to a description of some operation, or perhaps as much space occupied in giving the action of a certain remedy, when in both cases one-third the space might have sufficed, and the information fully imparted. At no time does one feel more like telling what he has done and how he did it, than just after doing it successfully. There is a certain inspiration that seems to possess him at such times, which admits of his story being better told, and I think generally more briefly and tersely than it can be sometime after when the fire of enthusiasm has been allowed to smolder. Now our dental journals are of value to us only in proportion as we remember and put in practice the valuable points they contain, and as memory is sometimes treacherous it is impossible to retain all that is of real value. We should devise some means of calling attention to the valuable points when we want to use them. A good plan is, when you read a new journal and find a new idea the value of which you may want to prove by actual test, or an old idea in new dress that you want to experiment with further, mark it. In some instances the marks will embrace the article in its entirety, while in others a single paragraph, or possibly but a few lines will be marked for reference. Take an ordinary memorandum or day book and index it by placing the letters of the alphabet on the outside margins of the leaves, and in your reading keep this little book near you and when you find something of special importance—something which you may want to use, mark it and enter it under the proper heading, giving name, number and year of publication, and you will have a very complete and satisfactory book of reference.—*O. State Jour.*

Cider Vinegar for Diarrhea.—Editor ITEMS: For seven years it has been my misfortune to be afflicted with a chronic diarrhea. In my own case at least, I consider a remedy the most useful “Dental Item” that could possibly be presented. After exhausting the best medical skill in Central N. Y., to no avail, I discovered that when I used sharp cider vinegar freely I was relieved. As I had previously ascertained that there was already an excess of acid in the bowels, I went to a physician who had been in practice 30 years, for a theory to explain such a strange phenomenon. He took down a medical volume where he read that vinegar gave tone to the bowels, while acid from the stomach weakened. It is not impossible, but you may have many readers similarly afflicted to whom the above may be as highly appreciated as by myself.

BENJ. F. WRIGHT, Elbridge, N. Y.

For Our Patients.

A LADY'S SUGGESTIONS TO DENTISTS.

Dental offices are often uncomfortably quiet, though they are bright and handsomely furnished, and have every appearance of neatness. They frequently need a few more books and papers (and real lively ones, too), also flowers, which add so much to the cheerfulness of an office, and are enjoyed by almost every person. These things help to entertain us while we wait, and divert our minds from the operation which we dread and must soon endure. While in the dental chair one is likely to read all the signs in sight, and count everything over several times. Now, to remedy this there should be within sight of the patient a number of novelties on which the eye may rest. You may be sure the patient will appreciate your good taste in pictures, flowers, etc., and it will serve to while away the time which at the best must pass but slowly. We need something pretty to look at, to keep from thinking how slow the dentist is, also how that clamp hurts, etc. The chair itself is very comfortable in front of a large window. The dentist, with clean, perfumed hands, examines each tooth, of course. Several need attention. Then comes the engine, excavators, files and cold water to cleanse the cavities. It would often save pain if this water was warmed just a little. Let me suggest that a towel or large napkin always be placed over the lady's shoulders and collar. That should not be forgotten, for many dresses are spoiled by water. We always feel relieved when our dress is protected. It is only a short time since I heard a lady remark, "Such a dentist spoiled my dress when he filled my teeth." May I suggest, too, that instruments be cleaned in some way after each operation. Ladies always notice these things, and can tell each other what dentists keep their instruments bright and clean. I try to make my engagements in the morning to be sure of clean instruments and clean water. I have seen instruments used when they plainly told of a former patient, and also noticed that a fresh glass of water was not provided to syringe the cavities.

These little things can easily be remedied, and make the patient more comfortable. We ladies recommend our physician and dentist to our friends, and these objections are mentioned, often to the detriment of the operator, though we are glad to speak of their good qualities. A little conversation with the patient is not amiss; it helps to pass away the time. We don't want to imagine for a moment the dentist has taken our mouth for an old stove and he is picking out the cinders. There are certainly a few that forget we have feeling. Gentleness wins patients, especially children. We frequently hear people say they

prefer having a tooth extracted to have it filled. This is often the fault of the dentist. We believe there are too many of this class of dentists, yet many are kind, thoughtful and sympathizing; also, exceedingly neat. These will certainly succeed, for we will find and recommend them. Many of our dentists think (or seem to) that there are seven working days in the week. People only have their work done Sunday because they can. Remember "six days shalt thou labor."—*Medical and Dental Journal*.

CHEAP DENTISTRY.

Beguiled by an advertisement in some paper, that "Dentistry in all its branches, can be had at greatly reduced prices", and taking it for granted that every one who hangs out his sign as "Surgeon Dentist," and takes special pains to sign his name with the prefix "Dr.," is of course a dentist, a call is made. The mouth having been examined, the patient is advised to have all his teeth extracted, as most of them having begun to decay, will not, if filled, last many years, and any expense thus bestowed on them will be lost; therefore it is best to make a "clean sweep" at once, and have a set of artificial teeth, that will never ache, (though, to look at, they are very likely to make the patient's friends ache.) The advice is adopted, and the sacrifice made; and teeth, that under the hands of a competent dentist, might have been saved many years, are consigned to oblivion.

Then the substitute is provided, which is such as any blacksmith, with a few weeks apprenticeship in some dental "shop," could furnish. They may or may not be suitable in size or color; in all probability they are an exact copy of the last set made for an individual whose features furnished the very extreme of contrast. The arrangement of the teeth is the same with almost every set of teeth inserted in the office, without reference to the contour of the face. If the mouth is a favorable one, the teeth may answer a tolerable purpose in mastication; but if unfavorable, the remedy is beyond the comprehension of the so-called dentist, who has managed to secure his pay before the results have been fully comprehended by the victim. This patient has patronized "cheap dentistry,"—has sacrificed what art can never restore; and experiences the most miserable failure in the attempt to do so.

Another patient visits a dentist who perhaps does not advertise cheap work, but goes on the principle of "*charging all they will stand*,—if close people, get the most you can, and work accordingly;—if '*high-toned gentlemen*,' make them pay well, as they will think the more of you." Such men, whose only object is gain, are not to be trusted with the duty of saving organs of such importance as the teeth; for, if you can pay them well, then the idea is to fill everything, whether it is

worth saving or not, and in not a few instances make cavities where none existed.

On the other hand, let the patient visit the dentist who has earned and established a good reputation, "whose works do praise him,"—and in whom he can place confidence, and feel that whatever is done is the best that can be done. Then when the work is completed, let him remember that the dentist has spent years of study and toil to prepare himself for these duties, and that this preparation is his capital, his stock in trade; and then that he is the best judge of what his services are worth, and that such services are not to be balanced with those of the quack, whose only capital is his assurance.

It is utterly impossible for a dentist to prepare himself for the practice of his profession properly, and then to spend the necessary time in his operations, to do his duty to his patients, and assume the responsibility of them, at the prices obtained by some so-called dentists. But then we would not have the reader infer that because the dentist charges a high price, he is necessarily a good dentist; by no means,—for some of the merest botches succeed in getting the highest prices. But the idea is this: true professional skill should receive its reward, bestowed not grudgingly, but cheerfully. Let the patient have confidence in his dentist, (and never employ one in whom you have not the fullest confidence) not only in the performance of the work, but also as to the price which he deems his services are worth.—*Allport's Dental Journal*.

"**Sour Tartar.**"—A gentleman who had come to town to see his son graduate from a noted institution of learning, called in to talk about a new set of teeth. His teeth were all out but one lower cuspid. He had not decided to get a new set, for he did not want to part with the one left. I examined it.

"Is it sound?" said he.

"It is sound, but there is tartar on it."

"Tartar on it? Then I will have it out," he replied; "for tartar is very sour, and will give me a sour stomach. Yes, take it out as soon as you can; it is lucky I found out its condition." L. S. KEAGLE.

How to care for permanent teeth.—The value of the permanent teeth depends largely on the healthfulness of the first or temporary set. The milk teeth should be cared for and preserved till nature is ready to supply their places with the permanent organs. The arch of the mouth is thus preserved, the roots absorbed and the material therein is not lost to the system in the development of the new teeth. Irregularity of the second set would be almost unknown if by frequent visits to a competent dentist the first teeth were retained till nature has no further use for them.—*Health and Home*.

WHAT SHALL WE LEAVE?

What shall we leave behind us, friends?

Gold?—only gold allied to dust?

Will horded millions make amends

For goodness, when our coffers rust?

Perhaps it's pride of skill we leave;

A thing of no mean worth, 'tis sure;

But ah, will brightest talents weave

A crown of life that shall endure?

Perhaps we've toiled to leave a home,

To shield our children from the strife

Of what in this cold world may come

When we are done with toil and life.

But something more than these,

Must glow upon the path of life;

A something that, in spite disease

And death, is left reminder of the strife.

This is the question of our life:

If passing through this transient sphere,

We make it but an *earthly* strife,

What shall we gain by being here?

How shall we mark life's daily path,

If not with noble deeds, that shed

On others cheer and hope and faith,

And leave love's brightness in our tread?

There's nothing will endure the test

Of every thoughtful life but love;

A pure, unselfish love; a rest

Of love, in which we live and move;

Which brings the very God to us,

And brings us quite to God;—

That brings us heaven, and thus

Fits us, while here, for his abode.

T. B. W

Dental Esthetics relate to the production of the *beautiful* in human expression. This is more than a restoration of the features to their natural forms and expression. For Dental esthetics is the demand not only for *restoration* but for a *creation* of new forms of the features and a new and improved expression; a transformation of the naturally ugly countenance to the pleasing, the homely to the beautiful. This is one of the possibilities of dental esthetics.

The idea of beauty like that of art is complex, though its complexity is not distinguishable to careless observers; to them beauty is but a pleasing mental impression. When analyzed, we find it made of several elements.—*L. C. Ingersoll.*

Editorial.

THE ANNUAL SUPPER OF THE ODONTOLOGICAL SOCIETY OF NEW YORK.

In this society there are so many dentists distinguished for learning and skill that it occupies a prominent position in the profession, and wields an influence world-wide as a representative body.

Its annual supper on Feb. 10th, at the Hotel Brunswick, was therefore of much interest, specially as an effort was made to give it an eminently social and intellectual character.

The company was composed of more than one hundred prominent men of the society. Such a good looking, well kept, and esthetic company of *gentlemen* would be an honor to either of the learned professions. There were also present twenty-five or thirty invited guests, some of them men of distinction, (even editors of dental journals were there.)

The supper was superb, though we are sorry to be able to add that those who were responsible for its character were not able to rise into the new *regime* and exclude liquors. Five kinds of wine were served.

After supper the president of the society, Dr. E. A. Bogue, made an appropriate address, which was followed by facetious remarks, and the reading of regrets, by Dr. N. W. Kingsley, chairman of the committee of arrangements. The toast of the evening, representing the dental profession, was a masterly oration by Dr. J. Smith Dodge; this was responded to by Gen. Horace Porter on behalf of the invited guests. He could not have done better. Rev. Dr. Howard Crosby's speech was well received, though we fear his pronunciation of the name of the society will be a sad affliction to the members. With all the contortions possible to one so dignified, he said he had experienced the appropriateness of their name—the Oh, don't, O logical Society.

Though the gathering did not disperse till 1 A. M., there were but few short, sharp, skillful or witty speeches, because some, when they had occupied their own time took also the time of others, and wandered loosely over irrelevant subjects. We might mention three or four who, if they had each embraced in five minutes what they said in twenty—or all they should have said—would have delivered really excellent speeches. But, of course, it could not have been expected that the excellent program of the chairman could be so perfectly carried out as to defy criticism. It was an enjoyable evening, made specially so by the immediate company we were in. On our left was the fatherly and renowned Dr. J. W. Clowes; on our right the one who represented the entire state of New Jersey, and represented it with dignity, Dr. C. S.

Stockton, and next to him the famous microscopist and biologist, Prof. Heitzman; near by in front of us, was *the* representative of the great North-west, Dr. W. W. Allport, while facing us on the right was the "Daddy of the profession," the one whose mere presence is a feature in any scientific gathering, and whose speeches are never forgotten, Dr. Wm. H. Atkinson. His speech on this occasion was characteristic. We shall feel it a pleasure to refer in the future to many bright things said by the various speakers. Besides those mentioned as speakers were Dr. W. H. Dwinelle, of New York, Profs. C. A. Kingsbury and J. E. Garretson, of Philadelphia, Dr. L. D. Shepard, of Boston, Dr. J. N. Crouse, of Chicago, Dr. A. F. Beers, of Paris, and some others whose names have slipped our memory.

But really, if only five minutes had been assigned to each, and all had indulged who could have spoken well, the assembly would have been obliged, in the midst of orations to adjourn for breakfast. Wisely, those were selected to speak who, perhaps, were in the condition, of the Methodist brother, who we once heard speak in lovefeast: one after another would rise quicker than he could, till finally he helloed, "Bro. Coryell, I must speak or I shall bust!"

It is much easier for fluent speakers, who are full of their subject, to speak than to remain silent; therefore, the following eminent gentlemen—and others whose names are not now in our mind—were selected to fill this more difficult "silent part" of the program. Each name, it will be seen is a tower of strength: Drs. A. L. Northrop, J. Morgan Howe, C. A. Woodward, E. T. Payne, W. A. Bronson, Charles Miller, Geo. S. Allen, Charles E. Francis, John B. Rich, James Goodwille, J. W. Clowes, and Profs. Frank Abbott and Carl Heitzman, of New York; Drs. Wm. Jarvie, C. A. Marvin, A. H. Brockway, and O. E. Hill, of Brooklyn; Drs. E. Y. Darby, J. J. Williams, and James W. White, of Philadelphia; Drs. W. W. Allport and T. W. Brophy, of Chicago; Drs. E. S. Niles and J. L. Williams, of Boston; Dr. C. F. Allen, of Newburg, Dr. R. R. Andrews, of Cambridge, Dr. C. R. Butler, of Cleveland, Dr. C. A. Brackett, of Newport, Dr. H. B. Nobles, of Washington, Dr. W. Geo. Beers, of Montreal, Dr. J. E. Line, of Rochester, Dr. J. McManus, of Hartford, Dr. E. B. Palmer, of Syracuse, Dr. F. N. Seabury, of Providence, and Dr. C. S. Stockton, of Newark.

To true corundum wheels, whether warped, or grooved by wear. Put them in boiling water, and, when hot, place them on plate glass and press them down on all parts till it takes the impression of the smooth glass. Of course, if it is deeply grooved it will be restored to a smooth surface only on the side next to the glass. Any smooth surface will do.

THE DENTIST'S EYESIGHT.

The dentist's eyesight is of so much importance it should receive intelligent attention. How may we improve it? How may we retain it? How may we assist it, when becoming enfeebled by use or age?

Once, while examining the numerous microscopes and specimens under them, in Prof. Heitzman's class-room, in New York, the Professor said, "Here is a specimen of special beauty and interest. The microscope is one of the best in the United States, and the specimen under its focus is a very rare one. Please notice the blood vessels and nerves passing through it." We looked, but could see nothing. "Why, Doctor, what is the matter?" Said he, "Look sharply." But we could not "look sharply," for our eyes had not been sufficiently trained; and so we frankly admitted. Dr. Atkinson, who was standing by, remarked, "This is just what the Professor has repeatedly told us: that if we would see things distinctly we must cultivate our eyesight." And so it is, one may look into the microscope and see nothing, where another, with no better sight, except by the cultivation he has given it, may see wonders. It is just so with the eyes unaided with the microscope. The eye is as capable of cultivation as either of the five senses, or as the hands or any member of the body, and it should be cultivated, especially by the dentist. Some men see everything in a general manner, and can give no specific description of anything, for they really do not see anything in their special aspects: their power of sight is not concentrated, they do not look with precision and particularity. So most young dentists and some older, in looking at the decay of a tooth, do not see it in its specific character, are not able to judge when it is properly removed, and fail to skilfully shape the cavity. The character of the decay, for instance, does not tell them their near approach to the pulp, and so they unwittingly expose it; it does not teach them the condition of the tooth, and therefore it often fails them in supporting the filling. The pulp may be strong, and the pulp at a safe distance to prevent exposure, and yet both may be in such a condition that without a discriminating sight, there will be failure so to treat the delicate dentine as to prevent after inflammation. A discriminating sight comes only from long, faithful and intelligent labor and skill in its cultivation.

But when this is attained, how may it be retained? Shall we aid our sight by glasses? This is advocated by some even when the sight is not poor or waning. We think this an error. All our muscles and organs are strengthened and improved by their natural use, and are weakened by any artificial aid. The foolish young lady *feels* stronger and walks straighter with her stays, and when their use becomes a habit it is difficult to stand or walk, or even sit, without them; but this doe;

not prove their usefulness or their healthfulness. If there is really a deformity to overcome, or a weakness that *must* have support, such things may be a benefit; but generally these prison jackets, which show their victims to be criminals are a disgrace. So with the eyesight; let well-enough alone. If you attempt to improve good eyesight by glasses you are sure to weaken it. There are instances where even children must wear glasses; but the foolish practice of putting them on the noses of young misses and boys for every foolish excuse, and sometimes from mere vanity, is becoming a nuisance to the wearers, and an offense to all sensible people. If you have good eyesight, be thankful, and let eyeglasses alone. Of course, in special cases, where magnifying mediums are called for, their aid is a blessing, whether in the form of eyeglasses or of a single lense.

“But what shall I do when my eyes are weary?” Rest them; stimulating them to endure more is folly. But sometimes rest is not inaction; rest may be change, recreation, variety. In their use, as in the whole tenor of our life, we want both vocation and avocation. The dentist who occasionally looks off his work and gives a furtive glance at his patient, and intersperses with his heavy work, lightheartedness, diversion, and cheerfulness, and thus mingles pleasure with labor, seldom loses his eyesight or his patients.

We are sometimes taught we should maintain a uniform distance between the eye and our work. This is more necessary and desirable with glasses, but with the unaided eye we think variety of distance is better. In ordinary seeing the eye seldom tires because the distances of objects are continually varying; but how quickly it tires when only seeing objects at one fixed distance.

Some seem to think the stronger the light the less the strain to the eye, but the best light is a mellow one. A northern light, where the sun never enters the window, is better than the sunlight of a southern exposure, though screened by a shade. The colors outside the window also have their effect. White walls are not good, nor its opposite, black; a light-blue is preferable. A light which comes from only one direction is not as good as where the operating chair can be set in a large baywindow, with light from both sides and from above, as well as from in front. And even with the best light, the sight may be aided by the position of the patient's head, the openness of his mouth, and the arrangement of the rubber dam. Some patients do not seem to know how to open their mouths in a dentist's chair, and some dentist's stuff so much in their patient's mouth, or get in so far and so clumsily themselves, as to hide everything. They forget their place is on the outside, and that their patient has some rights that even a dentist is bound to respect. Then, again, some dentists, though they do conclude to stay mostly on

the outside, tumble and sprawl about as though their eyes were in the back of their head, and their patient was their pillow.

Sometimes a small mirror, placed behind the tooth worked on, will aid the sight; and we are now entering on the use of minute electric lamps, with such a variety of adjustments and character of light that it is difficult to foresee their various advantages.

But in spite of the highest cultivation of our eyesight, and of our best means to aid and retain it, we shall finally be reminded by its diminishing at the approach of old age. Then what shall we do? Use just such glasses as will restore the little you have lost. Don't anticipate. Better buy a new pair of glasses every year than anticipate what you may need in the future. And see that they are of the best quality, and selected by an intelligent oculist. Also see that they are properly adjusted on the nose, and get such bows or ear-holders that will keep them in place while you are at work, otherwise the various positions the dentist must assume, is sure to "throw them out of gear." Be particular to keep them clean, and when once using glasses do not try to do without them.

A proof that a proper use of the eyes, even in doing minute and complicated work is not injurious to them is found in the fact that, as a rule, dentist's eyes are good; and that they retain good sight as long as those not using them in any special manner. This can also be said of engravers, and others whose business requires special use of the eyes.

"WHAT DOES HE MEAN?"

In December ITEMS we sought in a facetious way to show the ridiculousness of Prof. Flagg referring, in his *Quiz Questions*, to Tobacco chewing as a preservative of the teeth. The *Dental Practitioner* is afraid this will be construed as implying that the Professor chews it. Of course we did not intend to imply such a thing. Prof. Flagg is a gentleman, every inch of him; as cleanly in his habits as a woman, and very far above such a filthy practice. What we did mean to say, without saying it, was that the Professor made a mistake in putting tobacco chewing among preservatives of the teeth, at any rate without mentioning it as a filthy, injurious habit, inimical to professional dignity, and seriously and justly prejudicial to the success of a dental practitioner; and that this was especially a mistake when he knew there were those in his class using his *Quiz Questions* as authority who were guilty of this disgusting practice. Suppose the Professor had known that many in his college class were in the habit of eating a compound of arsenic and assafetida, would he be justified in referring to this practice as tending to give plumpness to the muscles and beauty to the features, without at the same time rebuking such a custom? When we see so many young men entering the profession with their mouths filled and their breaths foul with such a nasty weed as tobacco we feel jealous for the dignity of our profession.

MAN IS WONDERFUL AT INVENTION BUT CANNOT CREATE.

Man's power over substance is wonderful. He manipulates, appropriates, and controls with astonishing dexterity what he finds about him, but he cannot create. Out of the passive he can evolve energy, out of the simple he can produce ingenious complexities, out of the shapeless and apparently useless he can bring forth marvelous beauty and usefulness; yes, he can go into darkness and gloom and bring forth light and power and glory; but all this is by awakening the slumbering, arousing the latent, and placing into dexterous juxtaposition the chaotic. He does not create anything. He alone who creates provides him with the material, the workshop, and the tools, and bids him work out every desired purpose, construct every needed mechanism, and harness for his use every power of nature. He is doing it. He has brought to his feet for familiar converse animated spirits from every department. He makes them disclose mystic wisdom, reveal precious treasures, and do wondrous things. They cause the very elements to dance before him, singly or in combinations as he wills, to please his fancy, to exhibit their beauties, or to discover to him their usefulness. And yet he is not satisfied. He chafes at restraint and breaks all bounds; sends lightning to the ends of the earth with messages and calls ten thousand genii to work out his designs. But he cannot create.

He picks up the common sand; and lo, it is transformed into beautiful lenses! He arranges these into certain positions, and lo, the stars come to him. Again he throws sand into the fire, and out it comes so wonderfully prepared, that, as he looks through the crystal, invisible minuteness walks forth as a new world—plants in all their variety and richness, shrubs with flowers and luscious fruit, great forests with variegated foliage and inviting shade, and rocks, hills and dales with animated creation,—all on the surface of a mere atom; or he takes the tiniest speck of a drop of water and lo, he sees swimming and floundering, fish in every variety monsters of every size, a very sea of life and action. Yes, he finds the air itself full of living things, and not a nook but is alive with industry, forming and transforming, combining and recombining—all looking for man's approval and ready to become his servants. All this, and yet he cannot create; he only brings them to view.

He takes a beam of light, and, passing them through his wonderful prisms, separates it into the most gorgeous colors; he examines these colors and tells you the very sun or star from which it came and tells you the very material of which that star is made. He reunites the beam and passing it to a prepared surface, and by his will it remains there, a photograph of your every feature. All this, but he cannot create.

But what are all these achievements compared to his command of the lightning? Time would fail us even to enumerate them, and they increase so fast we should despair of finding an end.

All this he has accomplished, and much more is he accomplishing, but it is all by manipulating, appropriating, and controlling what is, and not by creating—he cannot cause to be a single element that is not,—or a single atom of earth or air; or the minutest being of life.

GOOD HEALTH, GOOD TEETH.

These are generally companions. In the lower animals we find few decayed teeth, because there are few diseased animals. To have good teeth we must not only be free from sensible disease, but we must have robust health, real vigor and brawn. The reason our present civilization brings bad teeth is because it brings lassitude and enervation, and with these, indulgences, stimulants, and luxuries, causing a physically low tone.

It has become impolite for our children, specially for our girls, to run and romp and jump and play vigorously, as of old. We of "good society" are so afraid of our young misses being pert, and of our boys being rude, that both are handicapped by artificial rules which prevent bounding joy, suppress free spirits, and weaken physical vigor. They are hardly out of their swaddling clothes before they are made to feel the restraints of "society," and they can hardly walk straight and speak plain before they are confined in close school rooms, and their plays circumscribed to a small area where every instinct for physical development and healthy spirits are checked. When they are sent to higher institutions of learning this is all still worse, and when they are brought into "society" it is all still worse, and when they settle down as men and women with the weight of the responsibilities of life on them and the still greater weight of the extreme proprieties of "society," it is all still worse. No wonder the very Indians are better off in health and good teeth than we are, and that the very beggars at our doors are above us in endurance and sound physique, and that the paupers of our neighborhoods become our successors in wealth and position.

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"Opium sales have increased in Georgia as a consequence of prohibition."—*E. G. Betty*, sub editor of the *Dental Register*.

Will you be kind enough to give us your proof, friend Betty? Such flings at prohibition are to be expected without proof from liquor men, for they are generally unprincipled and vindictive, but editors of respectable professional journals are supposed to be fair and honorable in their statements.

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SPUNK.

What is dental spunk?—T. M. W.

There are several kinds of spunk ; that used by dentists is a fungus growth on the oak and some other trees. It is found most abundant in tropical climates. In fact, our *dental* spunk is not found in northern regions. It grows in patches six to ten inches in diameter of varying length. The U. S. Dispensary says: "It is soft like velvet when young, but afterward becomes hard and ligneous. It usually rests immediately on the bark of the tree, without any supporting foot stalk, on the upper surface it is smooth, but marked with circular ridges of different colors of varying brown or blackish ; on the under, it is whitish or yellowish, and full of small pores ; internally, it is fibrous, and of a tawny-brown color. It is composed of short tubular fibers compactly arranged in layers, one of which is added every year. The best is that which grows on the oak. It has neither taste or smell. It is prepared for use by removing the exterior rind or bark, cutting the inner into thin slices, and beating these with a hammer till they become soft, pliable and easily torn. In this state it was formerly much used by surgeons for arresting hemorrhage.

Dr. A. W. Harlan, of Chicago, sailed for Liverpool on the 7th ult., for a brief visit to London, Paris, and Berlin. Insomnia had claimed him for a victim, and an ocean voyage was recommended. His many friends will earnestly hope that the trip may be beneficial. He will return the last of the present month.—*Independent Practitioner*.

We are sorry to learn from the above of Dr. Harlan's precarious condition ; but from our observation, as well as our knowledge of medicine, we would suggest that if his trouble is the result of a debilitated condition brought about by overwork in his professional and literary duties, that to cross the Atlantic at this season of the year, with the late suppers and broken rest that are sure to attend the visit of so "distinguished a physician and microscopist of Chicago" in "London, Berlin, and Paris," and all within the short period of six weeks, would not be considered the most rational or scientific treatment for this peculiar malady. But if, however, his insomnia is from *sectional* troubles, (from which it is claimed, he, as well as several other Chicago dentists are just now suffering,) and he succeeds in breaking this up it may result in his speedy recovery ; failing in this, we fear it will go hard with him.

"Don't be a fool, my dear," remonstrated a husband to his wife, who was letting her jaw swing loose in the breeze. "I won't, Mr. Jenkins," she answered ; "people won't know us apart if I did."

INTERNATIONAL MEDICAL CONGRESS.

Up to the present there has been so much confusion and uncertainty in relation to the next International Medical Congress, and to the section on Dental and Oral Surgery, that we have refrained from saying anything in regard to it. The statement has been made and believed by many that the Congress would not be held in this country, therefore many of the leading dentists have thought it prudent to defer positive action in regard to it.

But it has now been positively settled that the Congress will be held in Washington, D. C., and the time of the meeting fixed for the first Tuesday in September, 1887, and a Dental Section has been definitely settled on. All doubts having been removed, there is now no reason why the dental profession should not rally to the support of the Congress, and to the section which has been especially organized to further the interests of dental and oral surgery. Dr. J. Taft has been placed at the head of this section, and this is a positive guarantee that the section will be conducted in such a way as to further the best interests of our specialty.

The program for the work of the section is now under consideration and will soon be ready for publication, and we are informed on creditable authority that it will be superior to any program ever presented to a like gathering of scientific gentlemen.

Our reputation for patriotism, scientific attainments, and hospitality are at stake; let us therefore rally to the support of the Congress, and prove to the world that our reputation in these directions has not been overestimated.

We have received a communication from the President of the Section on Dental and Oral Surgery, Dr. J. Taft, which we take pleasure in publishing, as it gives the present status and foreshadows the future work of the Section.

The Pennsylvania State College of Center Co., Pa., is in a prosperous condition, as well it may be, for it is not only a first-rate school but tuition is free in all its departments. Send for circular.

Dr. Barrett says we are "straight-laced" and captious, and classes us with "hobbiests," "bad spellers," and "temperance cranks, usually the most intemperate of men—in their language." Isn't this courteous language from an esteemed contemporaneous editor? How glad we are that we can truthfully reply that Dr. Barrett is none of these,—except, perhaps that he sometimes allows his language to be slightly intemperate. But even this is very unusual. His style is generally dignified, his words happily chosen, and his manners marked with suavity and urbanity.

POLISHING RUBBER PLATES.

We received a request from a young dentist, asking for the best way of polishing rubber plates. There are so many ways, it is hard to say which is the best. We think a good plan is,—after removing plaster and filing off superfluous rubber, thus bringing to a rough shape what is desired,—to grind the surface with a piece of pumice stone. To prepare this for use, a roughly shaped piece is fastened to a mandril with shellac and worked down to shape. This used in the lathe either wet or dry cuts down the surface quickly. Follow this with pulverized pumice or cork. Then use a cotton wheel kept wet with pumice which is the precipitate of that bought of the druggist: that is, stir some pumice in water and pour off the cloudy water, the settlings of this milky water is what you use. If this is not fine enough use a second precipitate. Follow this with *another* cotton wheel or cone besmeared with *ungritty* precipitate chalk. A touch with dry chalk is good to finish; some prefer crocus and some plaster paris. Who has a better plan?

A bright idea of bridge work was shown us the other day in Dr. J. M. Clowes' office. It is a device all may adopt with profit, under similar circumstances—and it is easy to do when we know how. The case exhibited by Dr. Clowes, as an illustration, was the building up and bridging two very frail, broken down, upper right bicuspid teeth, during mastication, were struck by one strong under tooth in such a manner as to wedge them apart and keep them both useless, loose, and sore. In preparing both teeth for filling, he had so formed their cavities as that they run through from the front surface of the first bicuspid to the back of the second and formed in such a manner at the surface as to hold the fillings when united as by a double-headed rod. Then by bringing the two teeth together by a wire, they were filled so as to constitute one “grand molar.” Articulation with the under tooth being made good, he had made of two useless fragments one that was strong, durable, and useful. The lady said she had used it with pleasure for three years without any inconvenience. We think the Doctor will give us a lesson on this subject soon.

Dr. Barrett is generally grammatical, but in the following sentence he is neither grammatical nor rhetorical. Is he truthful? He says, referring to the ITEMS OF INTEREST: “One of our respected exchanges, which, like Hamlet's uncle, is a thing of shreds and patches, and whose contents consists of far too large a percentage of pickings and pilferings, has an editor who seems determined to make innate philological genius serve in place of literary training and scholastic advantages.”

The character here described is quite in contrast with that of the *Independent Practitioner*; and its editor is a learned and honorable man,—when not made beside himself by a bad temper.

Miscellaneous.

CORNELIUS AND W. K. VANDERBILT.

TWO WELL TRAINED, WELL BEHAVED, LEVEL-HEADED MILLIONAIRES.

The young Vanderbilts—I mean Cornelius and William K., the present heads of the family—have “gone at it” as if they meant to double the fortunes their father left them right speedily. Indeed, I don’t see how they can help it. Cornelius Vanderbilt is forty now, and he is worth, I suppose, at least \$80,000,000, perhaps more. This, at compound interest, should double every twelve years, which would make it no less than \$640,000,000 when Mr. Cornelius is seventy-six. It would increase a good deal faster than that at the interest which he is to-day receiving on his stock and bonds, but there will come panics, reverses, cataclysms, perhaps, and he cannot safely count on making more than \$460,000,000 in thirty-six years.

These young men are exceptional characters. They started in the path of life under the iron rod of their remarkable grandfather, the old commodore. He didn’t believe in boys at all; he didn’t believe in anybody much, and when Cornelius and William K. got out of short clothes he said to their father: “Look a here, Billy, boys are no good; there’s only one way to save ’em, and that is by putting them at something, and making ’em work all the while. Now, stick these boys in somewhere and make ’em come down to it. Don’t let up on ’em!”

William H. was not half as hard and inflexible as his father, but he was accustomed to mind that gentleman—as obedient when he was forty as when he was fourteen—and he knew perfectly well that it was better to kick a boy out of doors than to pet him and give him money; so he told the boys, as his father had told him, that they “must support themselves.”

Cornelius got a little clerkship in the Shoe and Leather Bank when he was sixteen and for four years he got there as early as any clerk, and worked as late and as hard. He allowed himself no extra holidays, and neither his father nor his grandfather did anything to make his life easier. During these years his uncle Torrence, going to Europe for the Commodore, invited “the youngster” to go with him, and the grandfather relented and consented. The boy was delighted at the chance, but the question of salary was involved. He presented the matter to the president. “You can go” said that amiable functionary, “but of course you will lose your salary, \$150.” That settled it. Cornelius turned his back on the temptation and declined to go.

When he was twenty he was made a clerk “at the bottom of the ladder” in the Hudson River Railroad office, and his younger brother, William K., was put at work there the next year. For more than eighteen years, now, they have “bowed down to it” in that great concern, and they are far better trained than their father ever was in all the details of the business.

They are not fast men. They own no yacht. They care nothing for clubs. They are content, up to the present time, with one wife apiece. They love their children, and each family, filing into church,

looks like a pair of gently sloping stairs. They care little for fast horses. They do not swear. One of them is Superintendent of a Sunday school, and both are deeply involved in various charities of the city.

Cornelius is first vice president and head of finance, William K. is second vice president and master of transportation. Each knows his business thoroughly. The most striking thing about either of them is that they work as hard as if they were hired by the job—which they are, by the way—and that they are perfectly democratic and accessible to anybody who has business with them. On the whole, the present seniors of the house of Vanderbilt are about the most quiet unassuming, well behaved, well trained and level-headed of the New York millionaires of the present day.—*Cincinnati Commercial Gazette*.

THE PROPER WEIGHT OF MAN.

Professor Huxley asserts that the proper weight of man is 154 lbs., made up as follows: Muscles and their appurtenances, 68 lbs.; skeleton, 24 lbs.; skin, 10½ lbs.; fat, 28 lbs.; brain, 3 lbs.; thoracic viscera, 3½ lbs.; abdominal viscera, 11 lbs.; blood which would drain from the body, 7 lbs. The heart of such a man should beat 75 times a minute. In 24 hours he would vitiate 1.750 cubic feet of pure air to the extent of 1 per cent. A man, therefore, of the weight mentioned should have 800 cubic feet of well ventilated space. He would throw off by the skin 18 ozs of water 300 grains of solid matter, and 400 grains of carbonic acid every 24 hours; and his total loss during that period would be 6 lbs. of water and a little more than 2 lbs. of other matter.

The matches consumed in the United States require wood to the annual value of \$3,300,000 in their manufacture. The railroads use about \$3,000,000 worth of wood for fuel, and about the same amount for ties each year.

Cocaine in Sea-sickness. The *Brit. Med. Jour.* tells us that Professor MANASSEIN of St. Petersburg, has been making observations on the value of cocaine in sea sickness and in cholera nostras. Among his fellow-passengers during a voyage he took this summer, were a lady and gentleman who always previously suffered severely from sea-sickness. A teaspoonful of a solution of cocaine, of the strength of one in a thousand, was administered, as a prophylactic, every two or three hours, from the commencement of the voyage. Although for forty-eight hours the weather was very stormy, they, for the first time in their lives, were entirely free from sea sickness, and were able to enjoy their meals thoroughly. A child of six, who had begun to be sick, was given half drachm doses of cocaine solution. After having taken two doses within half an hour, the child recovered completely, and played about all day in spite of the storm, taking a half drachm dose every three hours. To a girl of eighteen, who suffered very severely, two-dram doses were given, at first every half hour. After the second dose, she began to improve; and after she had taken six drams, was able to laugh and joke, and began to feel hungry; she continued well the whole voyage. The supply of cocaine not being large, Professor Manassein was unable to give it to all his fellow passengers; but its effects were so marked in the seven cases in which he employed it, that he is convinced that it is a valuable remedy for this affection.—*Medical Science*.